yellobrik®

PDM 1484 D

LYNX | Centraal™ ✓ yelloGUI ✓

AES/Analog Audio Embedder / De-embedder (balanced AES/ Analog)

- Simultaneous embedding and de-embedding
- Ideal as bidirectional master
- 3G-SDI Level A and Level B support
- SDI video formats up to 12G-SDI (2160p60)
- 4 x AES/Analog inputs / outputs with selectable audio groups
- Optional Fiber I/O
- Integrated 1 kHz test tone generator
- Automatic PCM / encoded audio detection
- Auto black if no video present
- Selectable SDTV 24 bit mode
- Video and Audio present LED indicators
- LynxCentraal & yelloGUI compatible for additional internal setting

Shown with Fiber SFP Option Installed

The PDM 1484 D is a versatile AES audio embedder and de-embedder designed for a wide range of SDI video formats up to 12G. It supports balanced AES/analog audio I/O using a 25 pin SubD connector.

Audio groups are selected using the rotary switches, and its possible to embed and de-embed additional audio groups by cascading modules together. Simultaneous embedding and de-embedding means the module will de-embed and output the audio from the selected audio group before overwriting with new audio (if required). The module automatically detects audio formats and will deactivate the sample rate converters to preserve encoded bit streams such as DolbyE.

The "auto black" mode uses a black video frame if no SDI input is present. This allows the module to embed audio even when no video source is available. This mode is useful if the module is being used in an "audio only" application.

The module is also compatible with the yelloGUI software package, which provides access to a host of additional internal settings which includes manual insertion of metadata (AFD,WSS,VI).
A 1 kHz test tone generator is included for audio testing purposes.

An SDI fiber input and output is also provided with a variety of plug in SFP options available.

Fiber I/O Options:

SDI Fiber Transmitter Options			
Model	Description	Power	Sense
OH-TR-12G-LC	SFP Fiber RX/TX - Singlemode, LC Connector - 10km	-5dBm	-10dBm
SDI CWDM Fiber Transmitter Options			
OH-TR-12G-XXXX-LC	12G CWDM Fiber RX/TX - Singlemode LC Conn. - 40km XXXX=Wavelength. 18 according to ITU T G692.2 1270nm through 1610nm	-2dBm	-10dBm

SDI Fiber Transceiver Options			
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SDI CWDM Fiber Transceiver Options			
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OH-TR-8-XXXX-LC	3G CWDM Fiber RX/TX - Singlemode LC Conn. - 80km XXXX=Wavelength. 18 according to ITU T G692.2 1270nm through 1610nm	+1 ... +5 dBm	-26 ... -28 dBm

Technical Specifications

SDI Input

1 x SDI video on 75 Ohm BNC connector

SMPTE 259M, SMPTE 292M, SMPTE 424M, SMPTE 2081-1, SMPTE 2082-1

Multi-standard operation from 270Mbit/s to 12Gbit/s

SDTV	(525/625)
720p	(23.98/24/25/29.97/30/50/59.94/60 Hz)
1080psf	(23.98/24/25/29.97/30 Hz)
1080i	(50/59.94/60 Hz)
1080p	(23.98/24/25/29.97/30/50/59.94/60 Hz)
2160p	(23.98/24/25/29.97/30/50/59.94/60 Hz)

Electrical Return Loss:	to 1.5GHz >15dB	to 3GHz >10dB	to 6GHz >7dB	to 12GHz >4dB

	270Mbit/s	1.5Gbit/s	3Gbit/s	6Gbit/s	12Gbit/s
Automatic cable EQ	340m	200m	150m	100m	100m
	Belden 1694A			Belden 4794R	

SDI Output

1 x SDI video on 75 Ohm BNC connector

SMPTE 259M, SMPTE 292M, SMPTE 424M, SMPTE 2081-1, SMPTE 2082-1

Electrical Return Loss:	to 1.5GHz: >15dB	to 3GHz >10dB	to 6GHz >7dB	to 12GHz >4dB

Fiber I/O

(optional) 1 x fiber optic input and output (see table)

SMPTE 297M - 2006

AES Input

4 x AES3 balanced inputs on 25 pin SubD Connector (110 Ohm)

AES group selection provided via rotary switch

AES Output

4 x AES3 balanced outputs on 25 pin SubD Connector (110 Ohm)

AES group selection provided via rotary switch

Power

+12VDC @ 12.96W nominal - (supports 8 - 14VDC input range)

Physical

Size (incl. connectors): 126mm x 90mm x 22mm (4.96" x 3.54" x 0.86")
Weight (excl. SFP): 200g (7.05oz)

Ambient

5 - 40°C (41 - 104°F) 90% Humidity (non condensing)

Model #

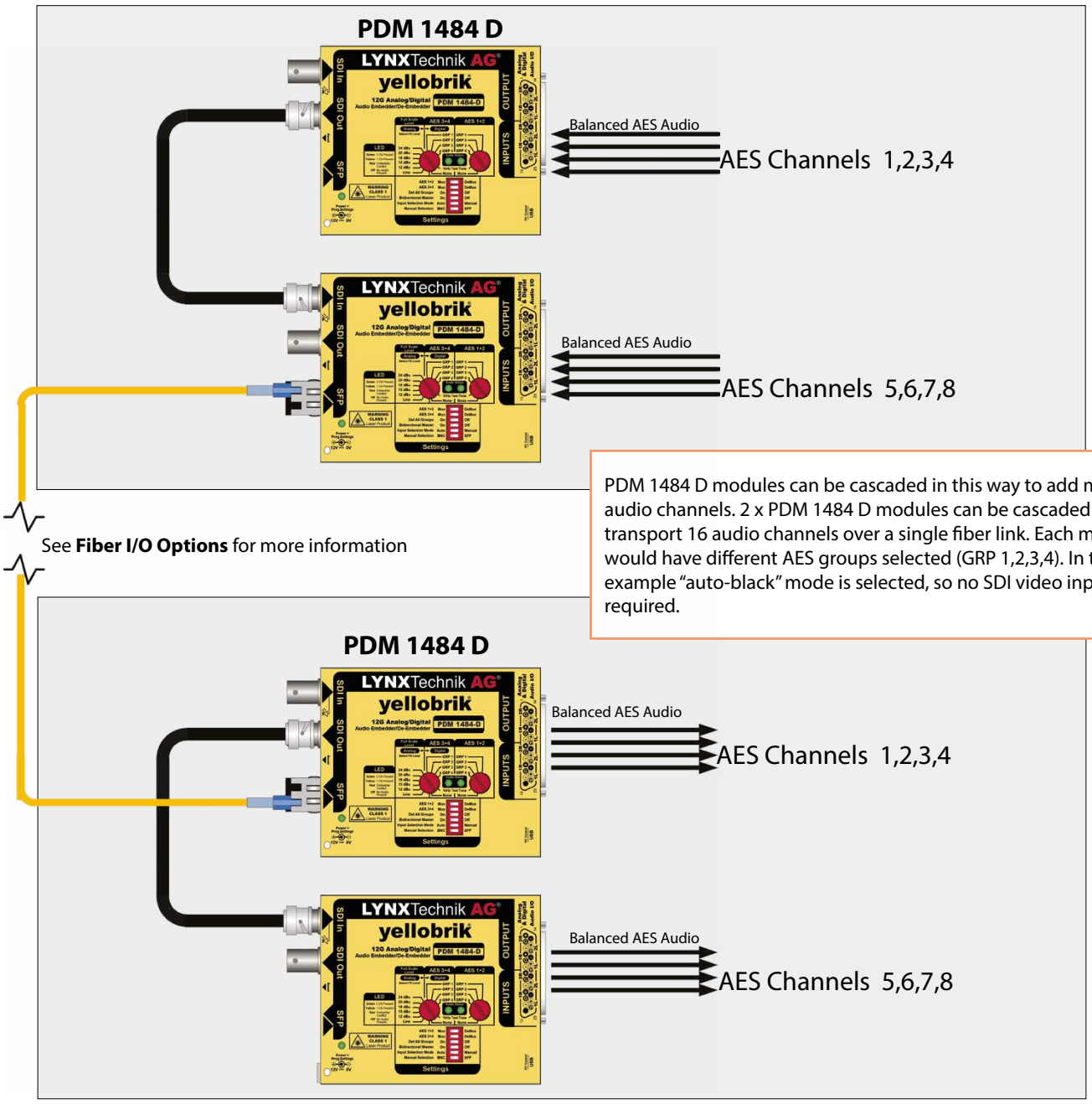
PDM 1484 D - (EAN# 4250479329065)

Includes

Module, RBO A025, AC power supply

PDM 1484 D Application

The basic SDI embedding and de-embedding applications for the PDM 1484 D are somewhat obvious, but with the "auto-black" mode the modules can be used to transport audio signals only. This provides a very cost-effective way to transport multichannel audio over fiber without the need for external optical multiplexing. The example below shows how two modules in each location can be used to transport 16 x digital audio signals between two locations over fiber.



PDM 1484 D modules can be cascaded in this way to add more audio channels. 2 x PDM 1484 D modules can be cascaded to transport 16 audio channels over a single fiber link. Each module would have different AES groups selected (GRP 1,2,3,4). In this example "auto-black" mode is selected, so no SDI video input is required.